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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/884,555

06/19/2001

Michael de La Chapelle

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EXAMINER

PEREZ, ANGELICA

ART UNIT

PAPER NUMBER

2684

13

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,555

Applicant(s)

DE LA CHAPELLE ET AL.

Examiner

Angelica M. Perez

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2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-29 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 24, 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Gallagher (Gallagher et al., Patent No.: 5,956,619).

Regarding claim 1, Gallagher teaches of a method for managing radio frequency (RF) transmissions (column 2, lines 27-30) from an RF system (column 1 lines 5-10) of at least one mobile platform operating within a predetermined coverage region (column 4, lines 20-23; e.g., "coverage area 22") to a space-based transponder orbiting within the coverage region (column 2, lines 30—35; where mobile stations are mobile platforms), in a manner to maintain a signal-to-noise ratio (E_b/N_o) of the RF transmissions within a predetermined range (column 7, lines 29-41; where power level is an indicator of the E_b/N_o ; e.g., signal strength derived from E_b/N_o), the method comprising the steps of: using a first control loop to monitor (column 2, lines 31-36; where more than one control loops are used in the system), by a central controller

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(column 1, lines 44-47 and column 2, lines 30-36; where the controlling is performed in the satellite), a signal-to-noise ratio of said RF transmissions received by the satellite transponder (column 2, lines 43-46), and to transmit commands to the mobile platform via the satellite transponder for maintaining the signal-to-noise ratio within a predetermined range (column 2, lines 51-54; where the measurements determine if the signal is within a desired strength) and using a second control loop including a mobile system of the mobile platform to monitor and adjust a power level of said RF transmissions to the satellite transponder (column 2, lines 46-57 where monitoring is done by finding the difference in signal strength), inbetween receipt of the commands from the central controller, to thereby maintain the power level of the RF transmissions at a previously commanded level (column 2, lines 55-57; where the adjustment maintains a power level commanded), inbetween receipt of updated command signals from the central controller (column 2, lines 47-52; where updating is done every time a difference in received signal strength and desired signal strength is found).

Regarding claim 24, Gallagher teaches of a method for managing radio frequency (RF) transmissions (column 2, lines 27-30) from an RF system (column 1 lines 5-10) of at least one mobile platform operating within a predetermined coverage region (column 4, lines 20-23; e.g., "coverage area 22") to a space-based transponder orbiting within the coverage region (column 2, lines 30—35; where mobile stations are mobile platforms), in a manner to maintain a signal-to-noise ratio (E_b/N_o) of the RF transmissions within a predetermined range (column 7, lines 29-41; where power level is an indicator of the E_b/N_o ; e.g., signal strength derived from E_b/N_o), Gallagher further

teaches of using a controller to form a first power level control loop for monitoring a power of signals relayed by the space-based transponder from the mobile platform (column 2, lines 55-57); using the controller to generate first power level commands and transmitting the power level commands to the space based transponder for subsequent relay back to the mobile platform (column 2, lines 55-57; where the adjustment maintains a power level commanded); and forming a second power level control loop between the mobile platform and the space-based transponder, where the mobile platform is able to implement second power level commands to signals transmitted from its RF system independently of the receipt of the first power commands from the controller (column 2, lines 55-57).

Regarding claim 27, Gallagher teaches of a method for managing radio frequency (RF) transmissions (column 2, lines 27-30) from an RF system (column 1 lines 5-10) of at least one mobile platform operating within a predetermined coverage region (column 4, lines 20-23; e.g., "coverage area 22") to a space-based transponder orbiting within the coverage region (column 2, lines 30—35; where mobile stations are mobile platforms), in a manner to maintain a signal-to-noise ratio (E_b/N_o) of the RF transmissions within a predetermined range (column 7, lines 29-41; where power level is an indicator of the E_b/N_o ; e.g., signal strength derived from E_b/N_o), using a controller to form a first power control loop for monitoring a power level of the RF transmissions relayed by the space-based transponder from the mobile platform (column 2, lines 31-36); Gallagher further teaches of using the controller to generate first power level commands and transmitting the power level commands to the space based transponder

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for subsequent relay back to the mobile platform (column 2, lines 55-57; where the adjustment maintains a power level commanded); and forming a second power level control loop between the mobile platform and the space-based transponder for enabling the mobile platform to monitor a power level of the RF transmission transmitted from the mobile platform (column 2, lines 31-36; where more than one control loops are used in the system)

Regarding claim 28, Gallagher teaches all the limitations of claim 27. Gallagher further teaches of using the controller to generate first power level corrections; and transmitting the first power level corrections to the space-based transponder (column 2, lines 55-57; where the adjustment maintains a power level commanded).

Regarding claim 29, Gallagher teaches all the limitations of claim 27. Gallagher further teaches of determining power level corrections to be applied to the RF system of the mobile platform from the information obtained from the second power level control loop, to permit the mobile platform to make level adjustments to the RF transmission independent of the first power control loop (column 2, lines 55-57)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallagher in view of Dintelmann (Dintelmann et al., US Patent No.: 6,256,496 B1).

Regarding claim 2, Gallagher teaches all the limitations of claim 1.

Gallagher does not teach where the predetermined signal-to-noise range comprises a range of about 1 dB.

In related art concerning a digital radio communication apparatus and mentod in a VSAT network, Dintelmann teaches where the predetermined signal-to-noise range comprises a range of about 1 dB (column 5, lines 7-10; where 1dB bellow 17dB degrades the signal or 1dB signal is a highly degraded signal).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Gallagher's power method with Dintelmann's 1dB range in order to adjust the power signal in order to maintain a desired signal quality.

Regarding claim 3, Gallagher in view of Dintelmann teaches all the limitations of claim 1. Dintelmann further teaches where the predetermined signal-to-noise range is above a threshold signal-to-noise ratio of the central controller (column 3, lines 39-41 and column 5, lines 7-14; e.g., "controller").

Regarding claim 4, Gallagher in view of Dintelmann teaches all the limitations of claim 1. Dintelmann further teaches of using the central controller to determine if the RF transmission from the mobile platform remains outside of the predetermined signal-to-noise ratio for more than about one second and, if so, commanding the mobile platform to cease the RF transmissions (column 5, lines 27-33; where the amount of data transmitted is reduced when the quality is not enough; e.g., after a certain time).

Regarding claim 5, Gallagher in view of Dintelmann teaches all the limitations of claim 1. Dintelmann further teaches where the step of monitoring by a central controller comprises monitoring by a ground-based central controller located within the coverage region (column 3, lines 34-41).

Regarding claim 6, Gallagher teaches of a method for managing radio frequency (RF) transmissions (column 2, lines 27-30) from an RF system (column 1 lines 5-10) of at least one mobile platform operating within a predetermined coverage region (column 4, lines 20-23; e.g., "coverage area 22") to a space-based transponder orbiting within the coverage region (column 2, lines 30—35; where mobile stations are mobile platforms), in a manner to maintain a signal-to-noise ratio (E_b/N_o) of the RF transmissions within a predetermined range (column 7, lines 29-41; where power level is an indicator of the E_b/N_o ; e.g., signal strength derived from E_b/N_o), the method comprising the steps of: using a first control loop to monitor and adjust a power level of the RF transmissions to maintain same within the predetermined range (column 2, lines 31-36), the first control loop including the steps of: receiving the RF transmissions at a central controller (column 2, lines 51-55; e.g., "determining...a difference value" corresponding to "monitoring"); comparing the determined signal-to-noise ratio with predetermined signal-to-noise values representing the predetermined range (column 2, lines 47-51); and transmitting commands representing changes in the power level from the central controller to the space-based transponder (column 2, lines 51-54), and from the space-based transponder to the mobile platform (column 2, lines 53-55), to thereby command the mobile platform to adjust a power level of its the RF transmissions, to

maintain the signal-to-noise ratio of said RF transmissions within the predetermined range (column 2, lines 55-57).

Gallagher does not teach of using the central controller to determine a signal-to-noise ratio of the RF transmissions received by the satellite transponder lines, in real time.

In related art concerning a digital radio communication apparatus and mentod in a VSAT network, Dintelmann teaches of using the central controller to determine a signal-to-noise ratio of the RF transmissions received by the satellite transponder lines (column 3, lines 39-41; e.g., "controller), in real time" (column 5, lines 20-25).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Gallagher's power method with Dintelmann's central controller functioning in real-time in order to concentrate control in one location and ensure availability of services.

Regarding claim 7, Gallagher further teaches of a second control loop between the mobile platform and the satellite transponder to monitor and maintain the signal-to-noise ratio at a previously commanded level (column 2, lines 30-34), the second control loop including the steps of: monitoring the signal-to-noise ratio of said RF transmissions between the mobile platform and the satellite transponder (column 2, lines 51-55; e.g., "determining...a difference value" corresponding to "monitoring"); adjusting the power level of the RF transmissions to maintain the power level at the previously commanded level (column 2, lines 47-51; where the "desired" power level corresponds to

"commanded level"). Dintelmann teaches of receipt of the commands from the central controller (column 3, lines 39-41).

5. Claim 8-13 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dintelmann in view of Chang (Chang et al.; US Patent No.: 6,606,307 B1).

Regarding claims 8, Dintelmann teaches the method comprising the steps of: using a central controller to receive and determine a signal-to-noise ratio of the RF signal transponded from the space-based transponder; assuming that the signal-to-noise ratio of the RF signal received by the central controller is approximately identical to a signal-to-noise ratio of a RF signal at an output of the space-based transponder (column 5, lines 1-6).

Dintelmann does not teach of determining a power spectral density (PSD) of an RF signal from a mobile platform having an RF transmitter/receiver directed at a space-based transponder, and of determining an effective isotropic radiated power (EIRP) value of an RF signal directed at the space-based transponder by the mobile platform as a function of the signal-to-noise ratio of the RF signal received by the central controller, and denoting the EIRP value as a target EIRP; using the target EIRP and a signal pattern of an antenna of the mobile platform to determine an actual EIRP reaching a GEO arc within which the space-based transponder resides column ; and using the actual EIRP reaching the GEO arc to determine the PSD of said RF signal being transmitted by the mobile platform.

In related art concerning techniques for utilization of bandwidth space assets, Chang teaches of determining a power spectral density (PSD) of an RF signal

from a mobile platform having an RF transmitter/receiver directed at a space-based transponder (column 1, lines 51-62), and of determining an effective isotropic radiated power (EIRP) value of an RF signal directed at the space-based transponder by the mobile platform as a function of the signal-to-noise ratio of the RF signal received by the central controller (column 3, lines 30-37), and denoting the EIRP value as a target EIRP (column 3, lines 34-37); using the target EIRP and a signal pattern of an antenna of the mobile platform to determine an actual EIRP reaching a GEO arc within which the space-based transponder resides column ; and using the actual EIRP reaching the GEO arc to determine the PSD of said RF signal being transmitted by the mobile platform (column 3, lines 34-37 column 13, lines 58-65).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Dintelmann's method with Chang's power spectral density determination method in order to allocate the frequencies according to the services requested with improved quality of service.

Regarding claim 9, Chang teaches of a system for monitoring and controlling a power spectral density of an RF signal from a mobile platform having an RF transmitter/receiver directed at a space-based transponder (column 3, lines 38-42), the system comprising: a scan angle compensator system for monitoring a power level of a signal transmitted from the RF transmitter/receiver of the mobile platform (column 1, lines 54-59; where the angle compensator is inherent of the system), where the power level varies due to changes in an attitude of the mobile platform (column 3, lines 38-42; where altitude contributes to the variation of power). Dintelmann teaches of adjusting

the power level of the signal transmitted from the RF transmitter to minimize fluctuations of the power level when the signal is received by the space-based transponder (column 4, lines 29-34).

Regarding claim 10, Dintelmann in view of Chang teaches all the limitations of claim 9. Chang further teaches where the system comprises an open loop system which compares antenna pointing information generated by an onboard reference system with information contained in a prestored table, and modifies the power level of the signal in accordance with the information contained in the prestored table (table 1; where reference power information is used for modifications required).

Regarding claim 11, Dintelmann in view of Chang teaches all the limitations of claim 9. Dintelmann further teaches of a ground loop controller for measuring a signal quality of the signal when the signal is received from the satellite transponder at a ground station, and for generating a power correction command signal that is transmitted back to the mobile platform via the space-based transponder (column 5, lines 5-14 and lines 25-27).

Regarding claim 12, Dintelmann in view of Chang teaches all the limitations of claim 11. Dintelmann further teaches where the ground loop controller comprises a closed loop system (column 3, lines 39-41; e.g., "central station computer (controller)" corresponding to a closed loop system).

Regarding claim 13, Dintelmann in view of Chang teaches all the limitations of claim 12. Dintelmann further teaches where the ground loop controller only transmits the power correction command signals when a signal quality value of the signal differs

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from a desired predetermined value by a predetermined amount (column 5, lines 27-33; when "needed").

Regarding claim 19, Chang teaches of a system for monitoring and controlling a power spectral density of an RF signal from a mobile platform having an RF transmitter/receiver directed at a space-based signal relaying device; Dintelmann teaches of using the central controller to determine a signal-to-noise ratio of the RF transmissions received by the satellite transponder lines (column 3, lines 39-41; e.g., "controller"); Chang further teaches of using the approximate signal-to-noise ratio to extrapolate an effective isotropic radiated power (EIRP) value of an RF signal when the RF signal was radiated from the mobile platform RF determining a power spectral density (PSD) of an RF signal from a mobile platform transmitter/receiver (column 3, lines 34-37) ; and using the EIRP value to estimate the actual EIRP of the RF signal received by the space-based transponder (column 3, lines 34-37 column 13, lines 58-65).

Regarding claim 20, Dintelmann in view of Chang teaches all the limitations of claim 20. Chang further teaches of using information concerning pointing direction of antenna of the mobile platform radiating the RF signal in estimating the actual EIRP (column 2, lines 12-15; e.g., "multiple data").

6. Claims 14-18 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dintelmann in view of Chang as applied to claim 13 above, and further in view of Gallanger.

Regarding claim 14, Dintelmann in view of Chang teaches all the limitations of claim 11.

Dintelmann in view of Chang does not teach where the power correction command signal represents an increment value by which the power level of the signal is to be modified.

In related art concerning a satellite controlled power control for personal communication user terminals, Gallanger teaches where the power correction command signal represents an increment value by which the power level of the signal is to be modified (column 2, lines 55-57; where the adjustment includes an increment in the power level).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Dintelmann's and Chang's system with Gallanger's power increment in order to maintain a desired quality of service.

Regarding claim 15, Chang teaches of a system for monitoring and controlling a power spectral density of an RF signal from a mobile platform having an RF transmitter/receiver directed at a space-based transponder (column 3, lines 38-42), Gallanger teaches of the system comprising: a ground loop controller for measuring a signal quality of the signal when the signal is received from the space-based transponder at a ground station (figure 7, item C), and for generating a power correction command signal that is transmitted back to the mobile platform via the space-based transponder, to thereby maintain the power spectral density of the signal within a predetermined limit (figure 7, item F).

Regarding claim 16, Dintelmann in view of Chang in further view of Gallanger teaches all the limitations of claim 15, Gallanger further teaches where the ground loop controller comprises a closed loop system that compares a signal quality of the signal received at the ground station to a predetermined value and generates the power correction command based on a difference in signal quality between the signal received and the predetermined value (column 6, lines 65-67 and figure 7, item F).

Regarding claim 17, Dintelmann in view of Chang in further view of Gallanger teaches all the limitations of claim 15. Chang teaches of a scan angle compensator system for monitoring a power level of a signal transmitted from the RF transmitter/receiver of the mobile platform (column 1, lines 54-59; where the angle compensator is inherent of the system), where the power level varies due to changes in an attitude of the mobile platform (column 3, lines 38-42; where altitude contributes to the variation of power). Dintelmann teaches of adjusting the power level of the signal transmitted from the RF transmitter to minimize fluctuations of the power level when the signal is received by the space-based transponder (column 4, lines 29-34).

Regarding claim 18, Dintelmann in view of Chang teaches all the limitations of claim 17. Chang further teaches where the system comprises an open loop system which compares antenna pointing information generated by an onboard reference system with information contained in a prestored table, and modifies the power level of the signal in accordance with the information contained in the prestored table (table 1; where reference power information is used for modifications required).

Regarding claim 21, Gallagher teaches of a method for managing radio frequency (RF) transmissions (column 2, lines 27-30) from an RF system (column 1 lines 5-10) of at least one mobile platform operating within a predetermined coverage region (column 4, lines 20-23; e.g., "coverage area 22") to a space-based transponder orbiting within the coverage region (column 2, lines 30—35; where mobile stations are mobile platforms), in a manner to maintain a signal-to-noise ratio (E_b/N_o) of the RF transmissions within a predetermined range (column 7, lines 29-41; where power level is an indicator of the E_b/N_o ; e.g., signal strength derived from E_b/N_o), the method comprising: using a first control loop to enable a controller to monitor and adjust a power level of the RF transmissions transmitted from an antenna of the mobile platform (column 2, lines 31-36). Dintelmann further teaches where the step of monitoring by a central controller comprises monitoring by a ground-based central controller located within the coverage region (column 3, lines 34-41). Gallagher further teaches of forming a second control loop between the spaced-based signal relaying device and the mobile platform (column 2, lines 51-55) and the satellite transponder to monitor and maintain the signal-to-noise ratio at a previously commanded level (column 2, lines 30-34), the second control loop including the steps of: monitoring the signal-to-noise ratio of said RF transmissions between the mobile platform and the satellite transponder (column 2, lines 51-55; e.g., "determining...a difference value" corresponding to "monitoring"); adjusting the power level of the RF transmissions to maintain the power level at the previously commanded level (column 2, lines 47-51; where the "desired" power level corresponds to "commanded level"). Chang teaches of maintaining a power spectral

density (PSD) of the RF transmissions within the predetermined limit and of enabling changes to the power level of the RF transmissions from the antenna of the mobile platform to further ensure the PSD of the RF transmissions does not exceed the predetermined limit (figure 7, item F).

Regarding claim 22, Dintelmann in view of Chang in further view of Gallanger teaches all the limitations of claim 21. Dintelmann teaches of using controller to receive the RF transmissions; (column 3, lines 34-41) and Gallanger further teaches of comparing the signal-to-noise ratio of the received RF transmissions with predetermined, a signal-to-noise ratio (column 7, lines 29-41; where power level is an indicator of the E_b/N_o) and Chang further teaches of using comparison to generate commands sent by the controller to space-based transponder to extrapolate the PSD of the RF signal transmitted from the antenna from the signal-to-noise ratio of the RF transmissions (column 3, lines 38-42).

Regarding claim 23, Dintelmann in view of Chang in further view of Gallanger teaches all the limitations of claim 21. Gallanger further teaches where the second control loop enables the mobile platform to make changes to a power level of signals transmitted from the mobile platform in between receipt of the power level correction commands from the central controller (column 2, lines 31-36).

6. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallager in view of Chang (Chang et al.; US Patent No.: 6,606,307 B1).

Gallager teaches all the limitations of claim 24.

Gallager does not teach where the controller further monitors an aggregate power spectral density (PSD) of signals received from a plurality of mobile platforms operating with the predetermined coverage region to ensure that the aggregate PSD does not exceed a predetermined maximum value.

In related art concerning techniques for utilization of bandwidth space assets, Chang teaches where the controller further monitors an aggregate power spectral density (PSD) of signals received from a plurality of mobile platforms operating with the predetermined coverage region to ensure that the aggregate PSD does not exceed a predetermined maximum value (column 3, lines 30-33 and 61-66; where a plurality of mobile platforms is covered).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Gallagher's power method with Chag's aggregate power spectral density in order to obtain a better allocation of resources.


Regarding claim 26, Gallager in view of Chang teaches all the limitations of claim 24. Gallagher further teaches where the second power level commands determine via the second power level control level control loop are implemented inbetween receipt of the first power level commands (column 2, lines 31-36).

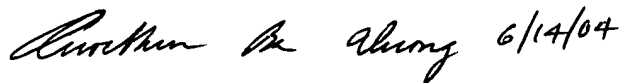
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


Angelica Perez
(Examiner)

 6/14/04
QUOCHIEN B. VUONG
PRIMARY EXAMINER

Art Unit 2684

June 10, 2004